

County of Los Angeles

Recirculated Draft
Environmental Impact Report
SCH No. 2004021002

Volume I
Introduction–Section 4.4

LANDMARK VILLAGE

Prepared By:



IMPACT SCIENCES, INC.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012



January 2010

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County Project No. 00-196 (5)
General Plan Amendment No. 00-196
Sub Plan Amendment No. 00-196
Specific Plan Amendment No. 00-196
Vesting Tentative Tract Map No. 53108
SEA Conditional Use Permit No. 200500112
Oak Tree Permit No. 00-196
Off-Site Materials Transport Approval No. CUP00-196
Conditional Use Permit (Off-Site Grading) CUP00-196



January 2010

LANDMARK VILLAGE RECIRCULATED DRAFT EIR

SCH No. 2004021002

Volume I Introduction–Section 4.4

Prepared for:

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January 2010

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California Department of Fish and Game, Vegetation Classification and Mapping Program, List of California Vegetation Alliances, CDFG, October 22, 2007 (CDFG 2007)
URS, Jurisdictional Delineation, Newhall Ranch Project for a Portion of the Santa Clara River and its Tributaries, Los Angeles County, California, September 2003 (URS 2003)
Department of Fish and Game, Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database, September 2003 (CDFG 2003)
Dudek and Associates, Inc. 2006. Biological Resources Technical Report for the Newhall Ranch Specific Plan Area, Los Angeles County, California. Prepared for the Newhall Land and Farming Company by Dudek and Associates, Inc.
Penrod, K., C. Cabanero, P. Beier, C. Luke, W. Spencer, E. Rubin, R. Sauvajot, S. Riley, and D. Kamradt. 2006. South Coast Missing Linkages Project: A Linkage Design for the Santa Monica-Sierra Madre Connection. Idyllwild, California: South Coast Wildlands, in cooperation with the National Park Service, Santa Monica Mountains Conservancy, California State Parks, and The Nature Conservancy.
UCSB (University of California, Santa Barbara) Biogeography Lab. 1999. California Gap Analysis Project (GAP). Donald Bren School of Environmental Science and Management, coordinated through the U.S. Geological Survey Biological Resources Division. Accessed 2008. http://www.biogeog.ucsb.edu/projects/gap/gap_home.html
Pacific Advanced Civil Engineering, Inc., *Newhall Ranch Resource Management & Development Plan: River & Tributaries Drainage Analysis, Santa Clara River*, December 2008

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Slade, 2001 Update Report Hydrogeologic Conditions in the Alluvial and Saugus
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Interim Remedial Action Plan Dated December 2005
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- USFWS Biological Opinion for the Natural River Management Plan and its Effects on the Arroyo Toad; November 15, 2002
- California Water Impact Network, et al. v. Newhall County Water District, et al., Appellate Case No. B203781; May 13, 2009
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- 2008 Santa Clarita Valley Water Report, April 2009
- CH2MHill, Calibration Update of the Regional Groundwater Flow Model for the Santa Clarita Valley, Santa Clarita, California, August 2005
- Friends of the Santa Clara River v. Castaic Lake Water Agency (2002) 95 Cal.App.4th 1373
- Friends of the Santa Clara River v. Castaic Lake Water Agency*, Case No. BS056954, filed October 25, 2002 Judgment Granting Peremptory Writ of Mandate
- Appellate court decision, *Friends of the Santa Clara River v. Castaic Lake Water Agency*, Court of Appeal, Second Appellate District, Division Four, Appellate No. B164027, Filed December 1, 2003
- Statement of Decision, *California Water Network v. Castaic Lake Water Agency*, Los Angeles County Superior Court No. BS098724, filed April 2, 2007 (Chalfant Decision.)
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